

failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Responsive to this rejection, the Applicants are amending the claims by deleting the limitation "said filtering" in claim 15 and in claim 34. Applicants respectfully submit that claims 15 and 34 are now claimed with sufficient particularity to be patentable. Applicants respectfully request that the rejection under 35 U.S.C. Section 112 be withdrawn.

In section 4 of the Official Action, the Examiner rejected claims 15 and 34 under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, allegedly results an improper definition of a process. The Examiner also indicated that claims 15 and 34 "provide for the use of accessing pixels from previous frames or scan lines, but, since the claim does not set forth any steps involved in the method/process to use the retrieving data of the pixels of the previous frames or scan lines, it is unclear what method/process applicant is intending to encompass."

Responsive to this rejection, the Applicants are amending the claims by deleting the limitation "means for accessing pixels of a previous interlaced half-frame to perform said filtering" in claim 15, and the limitation "means for

accessing pixels of a previous scan-line to perform said filtering" in claim 34. Applicants respectfully submit that claims 15 and 34 are now allowable under 35 U.S.C. 101 and respectfully request that the rejection under 35 U.S.C. Section 101 be withdrawn.

In section 5 of the Official Action, the Examiner rejected claims 15 and 34 as allegedly being inconsistent between the preamble and the details means.

Responsive to this rejection, the Applicants are amending the claims as shown above. In particular, the preamble now recites a device for generating mipmaps from video sources, as recited in amended claims 15 and 34. Applicants respectfully submit that claims 15 and 34 are now allowable and respectfully request that the rejection under section 5 of the Official Action be withdrawn.

Claim 15 has been rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kelly et al. (USP 5,606,650) in view of Su (USP 5,019,908). The Applicants respectfully traverse this rejection for the reasons presented below.

Claim 15 is being amended to recite the following:

15. A device for generating mipmaps from video sources, comprising:

a first adder configured to receive texels arriving from a video source, the first adder further configured to add two texels belonging to neighboring screen lines and to a same column;

a first FIFO buffer coupled to an output of the first adder, the first FIFO buffer configured to store an output value of the first adder when the first adder receives two texels belonging to neighboring screen lines and an even column;

a second adder having a first input coupled to the output of the first adder, a second input coupled to an output of the first FIFO buffer, and an output, the second adder configured to add in a next clock cycle the even column stored in the first FIFO buffer and an odd column from the first adder; and

a second FIFO buffer configured to store an output of the second adder.

Neither Kelly nor Su, considered alone or in combination, discloses or suggests the features recited in amended claim 15. Therefore, Applicants respectfully submit that claim 15 is patentably distinguishable over the cited references.

Nor has the Examiner established even a prima facie basis from which a proper determination of obviousness can be made

relative to the cited art taken in the proposed combination, because of the deficiencies in the disclosures thereof (as discussed in the above Remarks), and because there is not even any suggestion or motivation or instruction for combining these references as proposed by the Examiner to yield anything resembling the Applicants' claimed invention. Even assuming arguendo, that Kelly is modified by Su in the manner proposed by the Examiner, the resulting structure will still not yield the features recited in amended claim 15.

Furthermore, the combination of Kelly and Su is improper since the combination would require a substantial reconstruction and redesign of the elements shown in Kelly. (See MPEP 2143.01). There is no suggestion in the references on how to permit Kelly's device to function with Su's device. Furthermore, the references do not suggest or disclose any interface circuitry, systems, or techniques that would permit Kelly's device to function with Su's device. Therefore, the combination of Kelly and Su is improper. Applicants respectfully submit that claim 15 is patentably distinguishable over the cited references.

Claim 34 has been rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kelly et al. (USP 5,606,650) in view of Shiraishi (USP 5,903,276). The Applicants

respectfully traverse this rejection for the reasons presented below.

Claim 34 is being amended to recite the following:

34. A device for generating mipmaps from video sources, comprising;

a first adder configured to receive texels arriving from a video source, the first adder further configured to add two texels belonging to neighboring screen lines and to a same column;

a first FIFO buffer coupled to an output of the first adder, the first FIFO buffer configured to store an output value of the first adder when the first adder receives two texels belonging to neighboring screen lines and an even column;

a second adder having a first input coupled to the output of the first adder, a second input coupled to an output of the first FIFO buffer, and an output, the second adder configured to add in a next clock cycle the even column stored in the first FIFO buffer and an odd column from the first adder;

a second FIFO buffer configured to store an output of the second adder;

*a register coupled to an input of the first adder and
configured to store texels from even columns for one
clock cycle; and
a circuit coupled to the output of the second adder and
configured to compute mipmaps for the next higher
level of detail.*

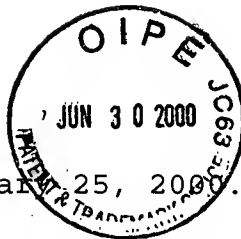
Neither Kelly nor Shiraishi, considered alone or in combination, discloses or suggests the features recited in amended claim 34. Therefore, Applicants respectfully submit that claim 34 is patentably distinguishable over the cited references.

Nor has the Examiner established even a prima facie basis from which a proper determination of obviousness can be made relative to the cited art taken in the proposed combination, because of the deficiencies in the disclosures thereof (as discussed in the above Remarks), and because there is not even any suggestion or motivation or instruction for combining these references as proposed by the Examiner to yield anything resembling the Applicants' claimed invention. Even assuming arguendo, that Kelly is modified by Shiraishi in the manner proposed by the Examiner, the resulting structure will still not yield the features recited in amended claim 34.

Furthermore, the combination of Kelly and Shiraishi is improper since the combination would require a substantial reconstruction and redesign of the elements shown in Kelly. (See MPEP 2143.01). There is no suggestion in the references on how to permit Kelly's device to function with Shiraishi's device. Furthermore, the references do not suggest or disclose any interface circuitry, systems, or techniques that would permit Kelly's device to function with Shiraishi's device. Therefore, the combination of Kelly and Shiraishi is improper. Applicants respectfully submit that claim 34 is patentably distinguishable over the cited references.

Applicants believe that this application is now in condition for allowance of all claims remaining herein, claims 15 and 34, as amended, and therefore, an early Notice of Allowance is respectfully requested. If the Examiner believes that direct contact with Applicants' attorney would help advance the prosecution of this case to finality, she is invited to telephone the undersigned at the number given below.

Applicants also hereby request and petition for an extension of time of one (1) month for responding to the



Office Action dated February 25, 2000. Attached herewith is a check for the requisite extension fee.

Respectfully submitted,
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